20001028.ba v03_n021.bam.20001028

>From ???@??? Sat Oct 28 06:19:54 2000 -0600
Date: Sat, 28 Oct 2000 06:17:30 CDT
From: Old Tube Radios <boatanchors@theporch.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: BOATANCHORS digest 3021
Message-Id: <20001028112031.0ECE227F@devel43.theporch.com>

BOATANCHORS Digest 3021

Topics covered in this issue include:

by "luc dugas" <collins2@globetrotter.net>

Message-ID: <39F8E4F6.51F11296@ix.netcom.com>
Date: Thu, 26 Oct 2000 21:14:14 -0500
From: "David L. Stinson" <arc5@ix.netcom.com>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Restoring wafer switch shaft?
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Most hobby shops that cater to RC airplanes and cars
carry square, round and hollow metal bar stock of
many small sizes.
Perhaps you can find a direct replacement there.

73 Dave S.

Message-Id: <4.3.2.7.0.20001026205424.00adb100@mail.gte.net>
Date: Thu, 26 Oct 2000 20:58:33 -0700
To: Old Tube Radios <boatanchors@theporch.com>
From: McGregor <cbmcg@gte.net>
Subject: Re: BOATANCHORS digest 3020
Cc: Old Tube Radios <boatanchors@theporch.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

Sandy -
Since the material is brass I suggest that you slip a brass sleeve over the
break and silver solder it.
You can either get some brass tube (try Small Parts Inc) that just fits
snugly over the shaft, and then will have to expand the bore of the bearing
(or replace it).....or get a tube that fits the bearing bore and turn down
the shafts to fit snugly in the tube.
I've used a sleeve approach successfully with epoxy on plastic shafts also.

Good Luck,
Chuck N7RHU

Message-ID: <39F96FB6.4251FE@erols.com>
Date: Fri, 27 Oct 2000 07:06:15 -0500
From: AAFRadio@erols.com
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
CC: Bill Cotter <bcotter@pop.uky.edu>

Subject: Re: Restoring wafer switch shaft?
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Bill has a solid idea, basically the same as Jim Reid's, using a larger (6-32) threaded rod, instead of a smooth rod. No reason it wouldn't work, and is probably easier to implement that the more "machine oriented" approach I tend to leap to. Again, though, the key is accurate centering. A sleeve which either slips over the shaft stub or screws onto the outer switch retaining thread is a good starting place for locating a hand drill bit. Might be necessary to get creative with duct tape or a strip of paper to build up the drill diameter to fit in whatever sleeve you can scrounge. It only has to last a few turns at low speed to start the drill in the center - then you can shift to a small (~1/16") to go deeper, and finish up with the tap drill size.

I'm a big fan of Loctite but it may be a bit more expensive than the other epoxies, depending on the size of bottle you buy and the yield strength. Doesn't do well in thick sections, but is unbeatable in ~.001" clearance situations and you don't need to mix it with a catalyst. The bearing and shaft locker is a real lifesaver when you have scored or undersized shafts to fasten to a bearing. Downside is that you need to heat it to >300 degrees F if you ever need to get it off.

73,
Mike

Bill Cotter wrote:

> I would suggest taking your approach a bit further. Drill and tap
> each shaft section. Join with a piece of threaded section (say,
> from a sacrificed 6-32 steel screw) with 3000psi Loctite applied to
> each half and assemble. This should offer more yeild strength and
> bonding area within the shaft.

Message-Id: <4.3.1.1.20001027082549.00d3b220@192.168.0.134>
Date: Fri, 27 Oct 2000 08:40:57 -0400
To: Old Tube Radios <boatanchors@theporch.com>
From: Chuck Swiger <cswiger@widomaker.com>
Subject: Re: FT243 Xtal source?
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"; format=flowed
Content-Transfer-Encoding: quoted-printable

Dan et al -

I've some 7Mc/s ham band xtals, FT243's which are currently

underutilized non-performing assets. I can only use 80Mtr fundamentals
at the moment anyway. Will gladly sell for about $3.50 each. I'll test 'em
out tonight and post the freq's available tomorrow morning. There's only
4 or 5, like 7.193 or so, some in the novice band.

Chuck
kb4new
cswiger@widomaker.com

At 08:05 PM 10/26/00 -0500, you wrote:
>I'm having a blast with my newly aquired Lafayette HA-410 10 meter
>AM rig. I would like to get some crystals for it. What's a good
>source for new crystals. They have to be FT243 and 7Mhz (range)
>
>73 de Dan -- WA=D8JRD ..

Mime-Version: 1.0
Date: Fri, 27 Oct 2000 08:35:12 -0700
Message-ID: <00BB1717.C22034@merisel.com>
From: James.Reid@merisel.com
Subject: Fixing wafer switch shaft
To: Old Tube Radios <boatanchors@theporch.com>
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit
Content-Description: cc:Mail note part

Hi all,
  David Stinson triggered an idea when he spoke of hobby tubing. Would it be
possible use JB Weld or similar epoxy(or perhaps a clamping fixture) to hold the
pieces together, but use a piece of brass tubing and sleeve the broken area and
then solder the tubing in place? Sounds feasible, but then I don't have the
radio in front of me, either. Just a thought.

-Jim

Mime-Version: 1.0
Date: Fri, 27 Oct 2000 08:36:13 -0700
Message-ID: <00BB173D.C22034@merisel.com>
From: James.Reid@merisel.com
Subject: Great minds....
To: Old Tube Radios <boatanchors@theporch.com>
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit
Content-Description: cc:Mail note part

.....think alike. Chuck McGregor already beat me to the punch.

-Jim

Message-ID: <D1892B7198A4D411BB7500A0C9692EC6085B54@hdsmsx34.hd.intel.com>
From: "Shriver, John" <john.shriver@intel.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: RE: Restoring wafer switch shaft?
Date: Fri, 27 Oct 2000 10:04:54 -0700
MIME-Version: 1.0
Content-Type: text/plain;
     charset="iso-8859-1"

One quickie on silver soldering -- any jeweler who can resize rings can silver solder. Probably better than you or I can. They use a different brazing material when silver soldering (brazing) gold (has gold in it!), you you might have to bring supplies, but I would think they would be happy to do it for a nominal fee.

Message-Id: <3.0.6.32.20001027132523.008d5100@mail2.coastalnet.com>
Date: Fri, 27 Oct 2000 13:25:23 -0400
To: Old Tube Radios <boatanchors@theporch.com>
From: Al Parker <anchor@coastalnet.com>
Subject: neat new toy
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
Content-Transfer-Encoding: 8bit

Hi Folks,
     I've been "messin' with" a neat rig for the last few days, and have waited long enuf -- I need to share it with you, now that I've got some info & pix available. I've been sharing some info, bit-by-bit, with a few listmembers, since Monday, when it arrived. I've really enjoyed looking into this rig, I hope you can do so also, at least vicariously.
     This is a very nicely built homebrew, 5-band switched, SSB xmtr. It was built by K8EOP, Carrol A. Wilson, Adrian, MI, now SK, probably sometime in the late-fifties to the early sixties. I think it was very well built. It came from his estate, with no paperwork, etc. Lynn, K5LYN, has discovered that it was originally published in QST, June, '58, written by George Bigler, W6TEU, and later in the '65 ARRL SSB Hdbk.
     If anyone happens to know anything about the builder, K8EOP, I'd sure be interested.
Take a look at http://www.thecompendium.net/radio/ and if you can add any info, or just want to share comments, I'd be happy to hear from you. I hope to have it on the air in the next day or 2. I put a new 6146 in it this AM, and the power output went from 5 to 40 watts, so there's good

progress & hope.
73,
Al, W8UT
New Bern, NC
BoatAnchors appreciated here
anchor@coastalnet.com or anchor@ec.rr.com
  (both work now, coastalnet will go away soon)

And remember; "-They don¥t make tubes nowadays like they used to..."

Date: Fri, 27 Oct 2000 14:15:10 -0400
From: BEN NOCK <G4BXD@compuserve.com>
Subject: Restoring wafer switch shaft?
To: Old Tube Radios <boatanchors@theporch.com>
Message-ID: <200010271415_MC2-B8AF-DFAF@compuserve.com>
MIME-Version: 1.0
Content-Transfer-Encoding: quoted-printable
Content-Type: text/plain;
      charset=ISO-8859-1
Content-Disposition: inline

Subject: Restoring wafer switch shaft?

Now, looks like I've got to do the relatively-impossible: find a
substance which will "glue"/"cement"/whatever the broken shaft
sections back together.
>>>>>>>>>>>>>>>>>>>>>>>>>>>

Why not drill and tap the two shafts ? =

Make one a LH thread, the other a RH thread, then using a 6 or 4 BA
bolt (with head removed) you can secure the two halfs together !

just an idea. =

Ben G4BXD.

Message-ID: <39F9C91F.ACD2B76F@home.com>
Date: Fri, 27 Oct 2000 14:27:43 -0400
From: Sandy Gerli <angerli@home.com>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Restoring wafer switch shaft
Content-Type: text/plain; charset=us-ascii

Content-Transfer-Encoding: 7bit

Hi, gang,

I have received a TON (metric, SAE, your choice) of responses to
my original post, and I appreciate them all! A lathe-savvy friend
at the Univ. of Rhode Island is going to centerbore the pieces,
braze them and machine the result back down to size. Looks like
I'll be all set.

Thanks again to one and all!

73,
--
Sandy Gerli, AC1Y
500 Country Club Road
Avon, CT 06001-2406 USA
Telephone: 1-860-675-5566
E-Mail: angerli@home.com

Life Member: ARRL & QCWA
CCA, HCA, and Old Heathkit Green!!

Boatanchors are Ham Radio's heritage!
Restore something, anything! Smell that hot solder!
Better 'n booze...
And, you can get up afterwards if you stay away from the B+!!
Keep your finals dipped, now...

Date: Fri, 27 Oct 2000 18:12:28 -0400 (EDT)
Message-Id: <200010272212.e9RMCSB20433@ecunet.org>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: AM RADIO HI FI
From: JOHN.SEHRING@ecunet.org

To: boatanchors@theporch.com

> From: Sandy Gerli <angerli@home.com>
>
> I grew up (at least from my teens on) to WQXR, living in
> Greenwich, CT, just across the NY border in the little CT
> "panhandle". One fellow I always wanted to chase down was their
> morning host in the 1970s (I believe his name was Bob Edwards like
> the guy on NPR nowadays), as he occasionally said that he was a
> ham. He had a great banter and really knew his classical music and
> made it approachable by his chatter and descriptions. I wonder
> what ever happened to him? He's probably SK now.

I remember hearing him on one of the NYC 2m repeaters as he motored home after the show but that's all I know.

From: Bob Roehrig <broehrig@admin.aurora.edu>

> > Are there any disadvantages to all taking AVC detector from same place > as > AM detector? Maybe additional loading of secondary of last IF xfmr > leading > to a bit more recovered audio distortion? (I've always like > the idea of > high input impedance detector (infinitie impedance) a la > SP-600.)
>
> One thing I have done in the past when doing receiver mods to AM > detector is to use the negative output for the AVC (yeah, that's obvious > I know) and separately rectify and use the positive output for the > audio. Seem to get less distortion that way.

Excellent! Don't load detector for both functions at the same part of the RF cycle. You are talking about 2 separate diodes or am I confused/too tired?!

Halli SX-101A does that with diodes. Plate of AF det goes to IF, cathode of AGC det. goes to IF.

I note that early Halli SX-42 used both diodes of 6H6 to do AF, AVC & ANL. Later versions used only *one* diode of the tube to do all. Less AF detector distortion due to less IF can loading?

-John Sehring (Fri, Oct 27, 2000, Ipswich SD) UCC WB0EQ

Date: Fri, 27 Oct 2000 18:12:28 -0400 (EDT)
Message-Id: <200010272212.e9RMCSr03173@ecunet.org>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: AM RADIO HI FI
From: JOHN.SEHRING@ecunet.org

As Hank van Cleef <vancleef@adic.com> further discusses:

> As JOHN.SEHRING@ecunet.org discourses
>
> Thanks, Hank, for trip down Pilot & Magnavox memory lane. Oh, what have > they done to where WQXR used to live at 1560 kHz in NYC? Folks up & down > the eastern seaboard listened to wonderful classical music from 1940 onward > til ?? Oh, the glories of selective fading on top of Beethoven or Mozart! > I thought it would never end.

> I've forgotten the exact history of WQXR. My recollection is that the
> frequency was reallocated to a sports station, WFAN, which has the

On a trip to VA last Winter, I caught what sounded like a Disney
youth-oriented station on 1560 in NY.

> Of course, I'm reeking with prejudice, because all of my radio
> experience is with either classical or pre-rock popular music stations.

Ah, WNEW-AM, 1130, NYC, that was smooth

> Unfortunately, a 6E5 directly connected to that hefty AVC line would
> close completely on relatively weak signals. It closes at about 8
> volts with 250 volts on the plate, and the Magnavox develops about
> twice that on strong signals. The extended cutoff of the 6U5 will
> handle that, but modulating the plate voltage increase sensitivity for
> weak signals. One may critique wiring in the triode of a 6SQ7 in a
> circuit where the alternative (no plate voltage shunting) would be to
> use a second 6H6.

I recall the eye tube in the Mag to be suitable lively on weak sigs yet it
didn't close completely except on vy strong sigs. Actually, on extremely
strong sigs it went *past* full closure, ie. shadow completely gone except
for a narrow line, to "crossover" making a funny light colored "shadow".

> > But of course an AVC's channel having less selectivity than the
> detector > sees will actually decrease the "effective" selectivity of
> the radio. Off- > freq strong sigs can pump the AVC even if the
> detector isn't seeing them.
> Don't forget that this radio has six tuned IF circuits in it, and
> the AVC is taken off the fifth of those six. This is not a set designed
> for serious CW receiving, and it has no BFO; it's designed for AM
> broadcast and AM SWL, where a bandwith under 10Khz. would be rather
> narrow. I think selectivity in front of the AVC pickoff is probably
> adequate to prevent generation of AVC from out-of-band signals.

You make a good case for this. Only closely-packed SW sigs might cause
trouble.

> > This technique is ok I guess in consumer radios but has no
> place in more > "serious" radios. Yet the ct. persisted into even
> Hallicrafters commo > stuff. E.g. Halli S-76, SX-96, -100, & -101
> (unbelievable, the -101 is a > ham band only radio!) double conversion,
> 50 kHz IF's with vy good (for > lumped LC) selectivity, SW rx's meant
> for serious listening got compromised > by this.
>
> You've lost me here. "CT?" Center tap? That's the meaning I know
> for this term.

Oh, sorry, I use "ct." to mean "circuit"! Lazy of me.

I say again, in serious comm. radios, the AVC channel ought to see the same amount of selectivity as the detector. Don't want off-channel sigs pumping the AVC, negating some of that selectivity. It is amazing to find this in as late a set (their 1st one strictly for hams) as the SX-101. Why would anyone want, in any way, to reduce the effective selectivity of an rx? My guess the push for this came from marketing.

> So far as Hallicrafters radios go, I'm not much of a fan of the marque,
> and my knowledge of them is limited to the S-40 series,

Well, 1 RF amp, 2 IF's, single pentode AF output. No xtal filter or s-meter. Vy similar I'd say to National NC-57.

> the S-38 (six tube version),

AC-DC AA6, cheapie, I had the AA5 version as a kid.

> I've never tangled with one of their later designs with 50Khz IF's, so
> can't really comment on them except to note that 50Khz with any Q at all
> is not going to produce much for the SWL.

The 50 kHz Hallis (S-76 onward, see list above + SX-101A, SX-111, SX-115, SX-117, SX-122 (end of the line I believe)) were a revelation. S-76 first out around 1954.

Dual conversion, with 1.65 MHz 1st IF, images gone even on 10 m. Vy sensitive even on 10 m, even a piece of wire there produces enuf antenna noise to swamp RF amp noise.

Vy effective AGC, practically overload-proof. (I once ran an SX-100 inside the transmitter building of 5 kW AM station, no problems.) Had the reverse action s-meter, again, completely overload proof, i.e. you couldn't bang the pin on it. It reads 1st IF stage cathode current. S-meter vy lively on weak sigs yet still gives meaningful indications on strong sigs. ANL is very effective. Has hi/lo cut tone control, quite useful.

And the selectivity.... The SX-88 pioneered the 50 kHz IF but in a complex & costly way. The S-76 brought it to the masses. 5 positions of selectivity, 0.5 to 5 kHz (6:60 dB shape factors varied roughly 3.7 to 5.9), with nice fairly flat tops and fairly steep sides, take a look at the curves in ops manual. I think this is about as good as it gets with lumped LC circuits. Xtal-controlled 2nd mixer.

Drake also uses 50 kHz final IF in R-1, -2, and -4 thru -4B rx's. It's even more selective than the Halli's.

The SX-96 successor gave us a "selectable" sideband system. After zero-beating a sig (assumed BFO knob correctly set), you could select either side(band) of a sig without retuning. In fact you can get exactly the same effect by retuning freq. on an AM sig or retuning freq. & BFO on CW or SSB. In fact, this feature disappeared by the SX-122--it's not needed--they just added some handy markings to the BFO scale.

The SX-100 added an IF notch filter into the 50 kHz chain, works A1. SX-101, -101A, -111, -115, & -117 are ham band only. All use the same final IF scheme.

The -115 is triple-conversion, xtal-controlled 1st conv. osc. Has an interesting dual loop AGC setup. Full-selectivity-derived AGC drives IF stages, slightly less selectivity AGC channel drives RF amp. Have not handled a -115 since 1963 but remember a very smooth sounding radio on SSB. Halli claims this setup gives greater "effective" selectivity. I've got a box of Halli 50 kHz IF cans around here & plan to try this circuit some day on my SX-100.

> and it [RME-45] really needs more AVC for SSB. Of course that can be
> gotten either from using the full last IF secondary, or a capacitor tap
> from the last IF primary a la Magnavox. Worth noting that the last IF
> secondary is heavily loaded by 50K diode loads in the detector, and that
> is needed to get as much as 5Khz. into the audio.

Interesting point. Two cans are used for each 50 kHz IF xfmr. The 50 kHz Halli's final IF amp plate goes to a *tap* (a point of lower Z) on the primary of the last IF xfmr (in the whole series of radios). The top ends of the 2 separate 50 kHz cans are strictly cap-coupled via selectivity switch, which also varies the R of the circuit using another gang.

The AF detector is driven by a tap from the "secondary" (2nd can), a point of lower Z.

In the early sets, the AGC det. is driven from top (high Z) of the "primary" (1st can) via 27 pF (Xc = 120K), diode directly to ground, 2.2 meg load R in parallel with it to gnd.

In late sets, AGC det driven directly (no series C) by secondary tap, diode & 2 meg in series to ground. AF detector in parallel, diode in series with about 400K to ground.

Question is which produced more AGC voltage?

> I would not pass the Magnavox or Farnsworth radios off as "consumer
> radios" vs. "serious radios." Both are just as serious, both in
> design and in execution as a National NC-200 series set, and I don't

> think the National can be accused of being anything less than serious.

I agree. The Mag was serious indeed & I'll bet its price reflected that!

> Are there any disadvantages to all taking AVC detector from same place as
> AM detector? Maybe additional loading of secondary of last IF xfmr
leading > to a bit more recovered audio distortion? (I've always like the
idea of > high input impedance detector (infinitie impedance) a la SP-600.)

> Well, you can get into a whole raft of issues here, starting with the
> use of a remote cutoff tube in the second IF stage, where signal
> levels are relatively high, walking right into the Gm nonlinearity of
> a remote cutoff tube.

Elaborate, please?

> A common unamplified AVC taken from a diode detector does rely on the
> signal level being adequate for AVC but not too high for the following
> audio stage,

Why does AF stage care about AVC? Overload due to not enuf AVC?

> and it also presents a problem in that it has be be high impedance,
> putting a lot of DC resistance in the grid returns of the controlled
> stages.

But wouldn't that imply less loading by the AVC det. of the last IF xfmr?

> In this series of discussions, we've been talking about broad bandpass
> in IF's for fidelity, not narrow for CW, and a little extra loading on
> a broadband IF is a plus, not a minus.

But detector loading of last IF stage is a serious problem as Radiotron (&
probably Terman) discuss at length. That load is not pure R. R loading of
IF's is a poor way to get the right bandpass on top--it ruins skirt
selectivity I think.

Thanks for a great note!

-John Sehring (Fri, Oct 27, 2000, Ipswich SD) UCC WB0EQ

Message-ID: <39F9FEF4.5EE03C0F@home.com>
Date: Fri, 27 Oct 2000 18:17:24 -0400
From: Sandy Gerli <angerli@home.com>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: WANTED: SX-28 or 28A

Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi, folks,

Looking for a decent one in a cabinet. Anyone interested in
parting with one?

73,
--
Sandy Gerli, AC1Y
500 Country Club Road
Avon, CT 06001-2406 USA
Telephone: 1-860-675-5566
E-Mail: angerli@home.com

Life Member: ARRL & QCWA
CCA, HCA, and Old Heathkit Green!!

Boatanchors are Ham Radio's heritage!
Restore something, anything! Smell that hot solder!
Better 'n booze...
And, you can get up afterwards if you stay away from the B+!!
Keep your finals dipped, now...

Message-ID: <008b01c0402e$ea8c2420$a636a98e@lucdugas>
From: "luc dugas" <collins2@globetrotter.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: silent key
Date: Fri, 27 Oct 2000 18:59:38 +0300
MIME-Version: 1.0
Content-Type: multipart/alternative;
     boundary="----=_NextPart_000_0088_01C04048.0E7140A0"

This is a multi-part message in MIME format.

------=_NextPart_000_0088_01C04048.0E7140A0
Content-Type: text/plain;
     charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable

on the quebec phone net at 3780 khz when an om die we used to do the =
silent key ei. we send his callsign 3 times etc ending by RIP. does =
someone know the origin of that practice and was used in some way on =
landline before wireless era?

luc ve2lgj 73s

------=_NextPart_000_0088_01C04048.0E7140A0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

------=_NextPart_000_0088_01C04048.0E7140A0--

Date: Fri, 27 Oct 2000 19:29:44 -0500 (CDT)
From: Bob Roehrig <broehrig@admin.aurora.edu>
To: Old Tube Radios <boatanchors@theporch.com>
cc: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: AM RADIO HI FI
Message-ID: <Pine.OSF.3.96.1001027191708.5384A-100000@admin.aurora.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Fri, 27 Oct 2000 JOHN.SEHRING@ecunet.org wrote:

> Excellent! Don't load detector for both functions at the same part of the
> RF cycle. You are talking about 2 separate diodes or am I confused/too
> tired?!

Yup - 2 separate diodes.

> I note that early Halli SX-42 used both diodes of 6H6 to do AF, AVC & ANL.
> Later versions used only *one* diode of the tube to do all. Less AF
> detector distortion due to less IF can loading?

Haven't looked at many AVC/DET schemes lately, but I think even those
using separate diodes for det and AVC still use the neg half cycle for
both for some reason. Sometimes they were separated with a cap which
I think was supposed to reduce loading.

I was after a low-Z source impedance for a fast attack/slow release
AVC.

"Nostalgia is a thing of the past"

E-mail: broehrig@admin.aurora.edu or k9eui@arrl.net 73 de Bob, K9EUI
CIS: Data / Telecom Aurora University, Aurora, IL
630-844-4898 Fax 630-844-4222
PLEASE PUT ALL REPLIES IN ASCII TEXT ONLY

Date: Fri, 27 Oct 2000 20:06:57 -0700
From: Arden Allen <gumbear@pacbell.net>
Subject: Re: AM RADIO HI FI
To: Old Tube Radios <boatanchors@theporch.com>
Message-id: <0G3400ESEDQULP@mta2.snfc21.pbi.net>
MIME-version: 1.0
Content-type: text/plain; charset=ISO-8859-1
Content-transfer-encoding: 7bit

Hi John;

> > Are there any disadvantages to all taking AVC detector from same place
> as > AM detector? Maybe additional loading of secondary of last IF xfmr
> leading > to a bit more recovered audio distortion? .....

The "advantage" we should be looking for, IMHO, is low distortion audio from the detector. What seems to do the job is proper design, for the most part, of the last IF amplifier plate circuit. The intrinsic characteristics of the final IF transformer, the one that drives the detector diode(s), is crucial in preserving fidelity, I believe. I am of the opinion that air core transformers do the job best, there being no non-linearity problems with air like there are with iron or ferrite cores. Also, the higher the plate impedance of the last IF amplifier, the more the diode(s) "see(s)" a current source that provides charging currents proportional to RF peak voltages that charge the detector RF filter caps. That way the non-linearity of the detector diode(s) has less distortion producing effect. Having experimented with a 1937 Zenith receiver, which uses a 6K7 IF amp and big air core IF cans, I finally concluded that the various detectors I tried all worked well, not because of my "ingenious" circuit ideas, but because the ingenuity was already built in by the Zenith engineers. When it comes to IF cans, smaller is not really better.

Arden Allen KB6NAX Vallejo, CA gumbear@pacbell.net

Message-ID: <001101c040cd$2da909a0$57332fca@davprin>
From: "Dave prince" <davprin@gil.com.au>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Bliley Xtal info - Bendix Xtal help
Date: Sat, 28 Oct 2000 19:32:54 +1000
MIME-Version: 1.0
Content-Type: text/plain;

```
     charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

G'day Folks,

Going through a box of xtals, holders and slabs of xtal material
received from a deceased estate, I found a factory information sheet
on Bliley BC-2 Xtal Holder packaged in a little cardboard box
obviously along with the holder.

I have scanned the sheet as a GIF file of about 16k. If anyone would
like a copy, email me off the list and I'll send it as an attachment
to my reply.

Also, can someone give me a pointer please as to what military set a
Bendix MX-9G Xtal of 385kc belongs to. British Air Ministry Reference
No. is 110X/385.

Cheers

Dave Prince
davprin@gil.com.au
Ipswich, Queensland, Australia

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Message-ID: <003101c04089$bbef6720$7232a98e@lucdugas>
From: "luc dugas" <collins2@globetrotter.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: silent key procedure correction
Date: Sat, 28 Oct 2000 05:49:44 +0300
MIME-Version: 1.0
Content-Type: multipart/alternative;
     boundary="----=_NextPart_000_002E_01C040A2.DFDC24C0"

This is a multi-part message in MIME format.

------=_NextPart_000_002E_01C040A2.DFDC24C0
Content-Type: text/plain;
     charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable

on the quebec phone net at 3780 khz when an om die we used to do the =
silent key ei. we send his callsign 3 times etc ending by RIP.  does =
someone know the origin of that practice and was it used in some way on =
landline before wireless era?

                                luc ve2lgj 73s
```

------=_NextPart_000_002E_01C040A2.DFDC24C0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

* *
*   ---REMAINDER OF MESSAGE TRUNCATED---   *
*   This post contains a forbidden message format   *
* (such as an attached file, a v-card, HTML formatting)   *
*   Mail Lists at theporch.com only accept PLAIN TEXT   *
* If your postings display this message your mail program   *
* is not set to send PLAIN TEXT ONLY and needs adjusting   *
* *

------=_NextPart_000_002E_01C040A2.DFDC24C0--

End of BOATANCHORS Digest 3021
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